

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1. (Previously Presented) An oxide based mixture for forming a ceramic matrix comprising:

a sol gel comprising from about 10 wt% to about 25 wt% of metal oxide solids; and

alumina particles;

wherein the sol gel is mixed with said alumina particles to form a mixture including from about 40 wt% to about 70 wt% said sol gel and about 30 wt% to about 60 wt% of said mixture includes said alumina particles.

2. (Previously Presented) The mixture of Claim 1 wherein the sol gel is selected from the group consisting of alumina sol, alumina-coated silica sol and silica sol.

3. (Previously Presented) The mixture of Claim 2 wherein the ceramic comprises from about 0 wt% to about 33 wt% of the silica sol.

4. (Previously Presented) The mixture of Claim 3 wherein the ceramic comprises from about 5 wt% to about 10 wt% of the silica sol.

5. (Currently Amended) The mixture of Claim 1 wherein the alumina particles have a size of from about 0.1 ~~nm~~ μm to about 1.5 ~~nm~~ μm.

6. (Previously Presented) The mixture of Claim 1 wherein said mixture further comprises a filler material.

7. (Previously Presented) The mixture of Claim 6 wherein the filler material is a mullite.

8. - 22. (Cancelled)

23. (Currently Amended) The mixture of claim 1, wherein said sol gel includes a metal oxide content of ~~about 12 weight percent to~~ about 20 weight percent.

24. (Cancelled)